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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.         | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------------|------------------|
| 10/803,212   | 03/18/2004  | Kenneth C. Shuey     | ELSE-0826/E200230010        | 5828             |
| 23377  | 7590        | 09/19/2005           |                             |                  |
| WOODCOCK WASHBURN LLP<br>ONE LIBERTY PLACE, 46TH FLOOR<br>1650 MARKET STREET<br>PHILADELPHIA, PA 19103 |             |                      | EXAMINER<br>PATEL, PARESH H |                  |
|  |             |                      | ART UNIT<br>2829            | PAPER NUMBER     |

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

|                              |                 |                   |  |
|------------------------------|-----------------|-------------------|--|
| <b>Office Action Summary</b> | Application No. | Applicant(s)      |  |
|                              | 10/803,212      | SHUEY, KENNETH C. |  |
|                              | Examiner        | Art Unit          |  |
|                              | Paresh Patel    | 2829              |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 21-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Group I (Claims 1-20) in the reply filed on 07/13/2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: --Reducing power consumption of an electric meters using switch in parallel with an optical diode of an optical communication port--.

### ***Claim Objections***

3. Claim 16 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 16 should depend from claim 9.

**To expedite the prosecution it is assumed that claim 16 depends from claim 9.**

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-10 and 13-20 are rejected under 35 U.S.C. 102(b) as anticipated by Applicant disclosed prior art fig. 1-2, Hemminger et al. (US 6504357) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hemminger et al. (US 5555508)

Regarding claim 1, Applicant disclosed Prior art (hereafter APA) in fig. 1-2 discloses an electrical power meter [10] having electronic components, comprising:

a power supply [204] for converting alternating current (AC) voltage to a direct current (DC) voltage for powering the electronic components [205]; and  
an optical diode [201] in series with the power supply.

Regarding claim 2, APA discloses the meter of claim 1, wherein the optical diode converts an electrical signal to an optical signal [see paragraph 0026].

Regarding claim 3, APA discloses the meter of claim 1, wherein the electronic components include at least one of the following: a microprocessor [16], an analog-to-digital converter, a digital signal processor, and a resistive divider circuit.

Regarding claim 4, APA discloses the meter of claim 1, wherein the optical diode is a light emitting diode [201].

Regarding claim 5, APA discloses the meter of claim 1, wherein the AC voltage is provided by an electric power line [phase voltage A-C of fig. 1].

Regarding claim 6, APA discloses the meter of claim 1, further comprising an optical communications port [40] in communication with the optical diode.

Regarding claim 7, APA discloses the meter of claim 1, wherein the optical communications port provides data relating to the operation of the meter [paragraph 0014 and 0026].

Regarding claim 8, APA discloses the meter of claim 1, wherein the power supply is capable [204, see fig. 2] of providing power sufficient to operate the optical diode and the electronic components.

Regarding claim 9, APA discloses the meter of claim 1, further comprising a switch [203] in communication with the optical diode.

Regarding claim 10, APA discloses the meter of claim 9, wherein the switch comprises a transistor [203].

Regarding claim 13, APA discloses the meter of claim 9, wherein the switch provides DC current to the optical diode when a request for communication [from microprocessor of 205 to the base of 203] is received.

Regarding claim 14, APA discloses the meter of claim 13, wherein the DC current provided to the optical diode represents communication of data with an optical communications port [paragraph 0026].

Regarding claim 15, APA discloses the meter of claim 9, wherein the switch is controlled by a microprocessor device [205].

Regarding claim 16, Hemminger in fig. 5 discloses, the meter of claim 89, further comprising a buffer transistor [grounded transistor] in series connection with the switch.

Regarding claim 17, Hemminger in fig. 5 discloses, the meter of claim 16, further comprising a microprocessor for controlling operation of the buffer transistor [see arrow for 16].

Regarding claim 18, APA discloses the meter of claim 8, further comprising a first resistor [202] in series connection with the switch.

Regarding claim 19, Hemminger in fig. 5 discloses the meter of claim 8, further comprising a second resistor [resistor between +5V and 110] 3in parallel connection with the switch.

Regarding claim 20, APA discloses the meter of claim 1, wherein the optical diode causes a voltage drop [drop across 201] of the DC power provided by the power supply.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 11-12 rejected under 35 U.S.C. 103(a) as being unpatentable over APA and Hemminger et al. as applied to claims 9 and 1 above, and further in view of Litz et al. (US 5274082).

Regarding claim 11, APA and Hemminger et al. discloses all the elements except for the meter of claim 9, wherein the switch is in parallel with the optical diode. Litz et al. (hereafter Litz) in fig. 6 discloses the switch [36] is in parallel with the optical diode 30] to control the voltage at line 1 using microprocessor 13. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to add the switch in parallel with the optical diode of APA or Hemminger et al. to control optical diode, which further control external line. [see lines 25-50 of column 5].

Regarding claim 12. Litz discloses the meter of claim 9, wherein the switch allows DC current to bypass the optical diode.

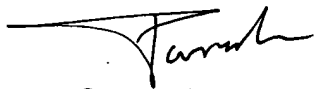
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paresh Patel whose telephone number is 571-272-1968. The examiner can normally be reached on 8:00 to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 571-272-2034. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2829

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



September 16, 2005

Paresh Patel  
Primary Examiner  
Art Unit 2829